ABSTRACT

Disclosed is a temperature controller and method for maintaining an optical-communication device at a constant temperature regardless of ambient temperature variation. The temperature controller includes: a temperature sensor for detecting the current temperature of a device which is to be temperature-controlled; and, a temperature-comparison section for comparing the current temperature detected by the temperature sensor with the predetermined temperature that is a proper operating temperature for the device, wherein the temperature-comparison section further includes: a differential amplifier for outputting the difference between signals which are inputted respectively into anode and cathode terminals; and first, second, third, and fourth resistance pads which are selectively short-circuited with one another according to the temperature-sensor type so as to vary the polarity of the signals inputted into the differential amplifier so that PTC and NTC sensors can be used at the same time in a single PCB regardless of the temperature-sensor type.